Europäisches Patentamt **European Patent Office** Office européen des brevets



EP 0 959 119 A3

(12)

EUROPEAN PATENT APPLICATION

(88) Date of publication A3: 23.02.2000 Bulletin 2000/08

(43) Date of publication A2: 24.11.1999 Bulletin 1999/47

(21) Application number: 99109765.0

(22) Date of filing: 18.05.1999

(51) Int. Cl.⁷: **C09J 7/02**, C09J 7/04, B32B 27/12

(11)

(84) Designated Contracting States:

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE **Designated Extension States:**

AL LT LV MK RO SI

(30) Priority: 19.05.1998 JP 15521698 10.09.1998 JP 27652698

(71) Applicants:

- NITTO DENKO CORPORATION Osaka (JP)
- KANSAI PAINT CO., LTD. Amagasaki-shi, Hyogo (JP)
- (72) Inventors:
 - · Inoue, Tsuyoshi, c/o Nitto Denko Corporation Ibaraki-shi, Osaka (JP)
 - Hayashi, Keiji, c/o Nitto Denko Corporation Ibaraki-shi, Osaka (JP)
 - · Sano, Kenji, c/o Nitto Denko Corporation Ibaraki-shi, Osaka (JP)

- · Wakabayashi, Akira, c/o Nitto Denko Corporation Ibaraki-shi, Osaka (JP)
- · Shibata, Kenichi, c/o Nitto Denko Corporation Ibaraki-shi, Osaka (JP)
- Sugimoto, Shuuji, c/o Nitto Denko Corporation Ibaraki-shi, Osaka (JP)
- Matsui, Komaharu, c/o Kansai Paint Co., Ltd. Hiratsuka-shi, Kanagawa (JP)
- · Eda. Takeshi. c/o Kansai Paint Co., Ltd. Amagasaki-shi, Hyogo (JP)
- · Ueda. Hiroshi. c/o Kansai Paint Co., Ltd. Amagasaki-shi, Hyogo (JP)
- (74) Representative:

Grünecker, Kinkeldey, Stockmair & Schwanhäusser Anwaltssozietät Maximilianstrasse 58 80538 München (DE)

Sheet for protecting paint film of automobiles (54)

Sheets for protecting paint films of automobiles which can adhere with no wrinkle to paint films of automobiles and cover the same, even in curved surface portions, at a high reliability while achieving excellent protection function to colliding matters, etc. (i.e., the inherent function of protecting sheets) and being easily peeled and removed after completion of the aimed protection, thus preventing the permeation of rainwater, etc. and protecting the paint films of automobiles from being damaged by denaturation, etc.

Such a sheet for protecting paint films of automobiles comprises a support (1) comprising a non-woven (11) having a polymer film (12,13) laminated on one or both surfaces thereof, and a pressure-sensitive adhesive layer (2) formed on one surface of the polymer film.

FIG. 1





PARTIAL EUROPEAN SEARCH REPORT

Application Number

which under Rule 45 of the European Patent Convention EP 99 10 9765 shall be considered, for the purposes of subsequent proceedings, as the European search report

Category	Citation of document with income of relevant passage		Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.CI.6)
Р,Х	DATABASE WPI Section Ch, Week 984 Derwent Publications Class A81, AN 98-537 XP002112752 & JP 10 237396 A (N) 8 September 1998 (1984)	1	C09J7/02 C09J7/04 B32B27/12	
A	EP 0 707 053 A (KANS DENKO CORP (JP)) 17 April 1996 (1996 * abstract * * page 3, line 18 -		1-4	
A	EP 0 410 674 A (KENI 30 January 1991 (199 * page 2, line 19 -	91-01-30)	1-4	
			,	TECHNICAL FIELDS SEARCHED (Int.Cl.6)
				C09J B32B
	MPLETE SEARCH		<u> </u>	
The Sea not comp be carried Claims a Claims a Claims r	mb Division appointers that the present a	application, or one or more of its claims, does, a meaningful search into the state of the art or y, for these claims.	/do annot	
	Place of search	Date of completion of the search	T	Exeminer
THE HAGUE 19 August 1999				hlicke, B
X:pa Y:pa do A:te	CATEGORY OF CITED DOCUMENTS rticularly relevant if taken alone urboularly relevant if combined with anot coment of the same category shnotogical background in-written disolosure	L : document cited t	cument, but pub te in the application or other reasons	lished on, or



INCOMPLETE SEARCH SHEET C

Application Number EP 99 10 9765

Claim(s) searched incompletely: 1-4 Reason for the limitation of the search: Incosistency between example/figures and description/claims. In description (p. 3, l. 16-19 and p. 5, l. 1-4) and claim 1 the sequence non-woven/polymer film/non-woven/adhesive is described for the four layer case. By contrast, the layer sequence described in example 6 and figure 2 is polymer film/non-woven/polymer film/adhesive. Since the adhesive should be applied to the polymer film, only the latter version seems meaningful. For this reason the search was performed in the four layer case according to figures and examples only.

ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

EP 99 10 9765

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

19-08-1999

	atent document d in search repo	rt	Publication date		Patent family member(s)	Publication date
JP	10237396	Α	08-09-1998	NONE		
EP	0707053	Α	17-04-1996	AU	689945 B	09-04-19
				ΑU	3316395 A	26-04-19
				CA	2160204 A	12-04-19
				JP	2832589 B	09-12-19
				JP	9003420 A	07-01-19
				US 	5601917 A	11-02-19
EP	0410674	Α	30-01-1991	CA	2019985 A	26-01-19
				DE	69017298 D	06-04-19
				DE	69017298 T	29-06-19
				US	5227225 A	13-07-19

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82